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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/965,419  | 09/27/2001  | Michael Yo-Yun Ho    | 812004              | 3807             |
| 45459   | 7590        | 10/17/2005           | EXAMINER            |                  |
| GROSSMAN, TUCKER, PERREAULT & PFLEGER, PLLC<br>C/O PORTFOLIO IP<br>P. O. BOX 52050<br>MINNEAPOLIS, MN 55402 |             |                      | HOANG, THAI D       |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2668                |                  |

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/965,419

Applicant(s)

HO ET AL.

Examiner

Thai D. Hoang

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Election filed 08/08/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
HANH NGUYEN  
PRIMARY EXAMINER

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02/04/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

- (a) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Figure 1 (output 115) and the specification do not disclose encoded bits provided from the overhead extractor are in parallel as recited in claims 5 and 15. Claims 6-8 and 16-18 are rejected because they depend on rejected claims 5 and 15 respectively.

Claims 20 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements and steps, such omission amounting to a gap between the elements and steps. See MPEP § 2172.01 and § 2172.01. The omitted elements and steps is a line overhead processor. The system of the application could not encode without the line overhead processor.

- (b) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-7 and 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The statement "the overhead processor" recited in claims 6-7 and 16-17 is not clear, since there are three overhead processors in the system: a first, a second and a third processor. Therefore, it is confusing what is meant by "the overhead processor". Claims 8 and 18 are rejected because they depend on rejected claims 7 and 17 respectively.

### ***Claim Objections***

Claims 11 is objected to because of the following informality:

Claim 11, lines 6 and 8, the statements "the overhead processor" found no basic. Previous paragraphs did not define what overhead processor; therefore, the statement "the overhead processor" is grammatically incorrect.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being unpatentable by Huscroft et al., US Patent No. 5,568,486, hereinafter referred to as Huscroft.

Regarding claims 1, 9-11 and 20 (as best understood), Huscroft discloses an integrated user network interface device. Huscroft teaches that the device (Fig. 1) comprises:

- a section overhead (SOH) processor 22 to process section overhead portion (a first overhead processor coupled to the at least one channel and configured to obtain a first portion of transport information);

- a line overhead (LOH) processor 26 to process line overhead portion (a second overhead processor coupled to the at least one channel and configured to obtain a second portion of transport information);

- a path overhead extract 56 to identify POH location (RPOHFP: receive path overhead frame position) in the SONET frame (a path pointer processor);

- a path overhead (POH) processor 28 to process path overhead portion of a SONET frame (a third overhead processor coupled to the path pointer processor and configured to obtain a third portion of transport information).

Furthermore, Huscroft discloses a transport overhead extract 54 coupled to the SOH processor 22, LOH processor 26 and POH processor 28 (an overhead extractor coupled to the first overhead processor, the second overhead processor and the third overhead processor to receive the first portion of transport information, the second portion of transport information and the third portion of overhead). The transport overhead extract 54 encodes to provide a receive transport overhead frame position (RTOHFP, col. 10, lines 49-52), and inherently encodes SOH and LOH portions of the SONET frame to provide frame (byte A1 and A2) and channel (byte D1-D12)

information (the overhead extractor configured to encode the first portion of the overhead and the second portion of the overhead and to provide a field of encoded bits representative of a frame number, a channel number and an overhead byte location).

Regarding claims 2 and 12, since the structure of the SONET frame including a plurality of rows and columns; the RTOHFP in the system disclosed by Huscroft is inherently given by a row and column position, therefore (wherein the byte location is given by a row number and a column number).

Regarding claims 3-4 and 13-14, since the frame number is always independent with the overhead position, therefore, the frame number is always independent with the row and column information (wherein the row and column numbers are independent of the frame number).

Regarding claims 5 and 15, as best understood, Huscroft discloses the transport overhead extract 54 encodes overhead of the SONE frame (wherein the field of encoded bits is provided from the overhead extractor in parallel).

Regarding claims 6 and 16, as best understood, a the parity bit is a part of the SONET overhead, therefore, the parity bit is inherently encoded in parallel with other overhead encoded bits (wherein the overhead processor provides a data byte and a parity bit in parallel along with the field of encoded bits).

Regarding claims 7-8 and 17-18, as best understood, Huscroft discloses the clock of the system is 19.44 MHz (col. 2, lines 13 and col. 6, line 46), and the receive path overhead clock (RPOHCLK) is 576 KHz (fig. 1, col.10, line 61). It indicates that the

RPOHCLK is provided by dividing a system clock (wherein the clock signal is provided by dividing a system clock signal).

Regarding claim 19, since a transport overhead of the SONET frame comprises a section overhead and a line overhead, therefore, the SOH processor 22 and the LOH processor 26 in the system disclosed by Huscroft encode the transport overhead portion of the SONET frame, and the POH processor 28 encodes the path overhead portion of the SONET frame (wherein the first portion of overhead comprises Transport Overhead, and the second portion of overhead comprises Path Overhead).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to the application:

US Patent No. 6895018 B1, Klish, "Method and system for improved sonet data communications channel."

US Patent No. 6765928 B1, Sethuram et al, "Method and apparatus for transceiving multiple services data simultaneously over SONET/SDH."

US Patent No. 6298038 B1, Martin et al., "Transparent transport."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D. Hoang whose telephone number is (571) 272-3184. The examiner can normally be reached on Monday-Friday 10:00am-6:30pm.

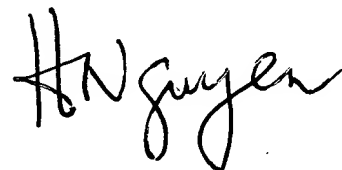
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Chieh can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Hoang

TH

A handwritten signature in black ink, appearing to read 'H. Nguyen'.

HANH NGUYEN  
PRIMARY EXAMINER